

Amendment
Application No. 10/509,380
Attorney Docket No. 042757

REMARKS

Claims 1-36 and 38 are pending in the application. Claims 1 and 2 are herein amended.
Claims 10-36 and 38 are withdrawn.

Claim Rejections - 35 U.S.C. § 102

Claims 1-6 were rejected under 35 U.S.C. § 102(b) as being anticipated by **JP 2000-063513**; **EPO 899 286**; **Jansen**, *Encapsulation of Guest Molecules into a Dendritic Box*, Science, Vol. 226, pp. 1226-1229, November 18, 1994; or **Cooper**, *Extraction of a hydrophilic Compound from Water into Liquid CO₂ Using Dendritic Surfactants*, Letters to Nature, Vol. 389, pp. 368-371, September 25, 1997.

Favorable reconsideration is requested.

A. JP 2000-063513

Applicants respectfully submit that JP 2000-063513 does not disclose “a step of intra-molecule bonding by crosslinking bonding residues in a molecular structure” as recited in amended claim 1.

JP 2000-063513 only discloses a process of bonding between intra-molecule residues and other molecules. JP 2000-063513 does not disclose intra-molecule bonding by crosslinking bonding residues in a molecular structure. Thus, JP 2000-063513 does not disclose the elements as recited in claim 1.

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Regarding claim 2, Applicants respectfully submit that JP 2000-063513 does not disclose a molecular structure in which “in the step of intra-molecule bonding by crosslinking the bonding residues, the bonding residues in the terminal portion of the molecular structure are crosslinked to form the molecular structure into a shell structure.”

JP 2000-063513 does not disclose crosslinking to form the molecular structure into a shell structure. Thus, JP 2000-063513 does not disclose the elements as recited in claim 2.

Regarding claim 3, Applicants respectfully submit that JP 2000-063513 does not disclose that “the bonding residue is an optically bonding residue.” Thus, JP 2000-063513 does not disclose the elements as recited in claim 3.

B. EPO 899 286

Applicants respectfully submit that EPO 899 286 does not disclose “a step of intra-molecule bonding by crosslinking bonding residues in a molecular structure” as recited in amended claim 1.

EPO 899 286 only discloses a process of bonding between intra-molecule residues and other molecules. EPO 899 286 does not disclose intra-molecule bonding by crosslinking bonding residues in a molecular structure. Thus, EPO 899 286 does not disclose the elements as recited in claim 1.

Regarding claim 2, Applicants respectfully submit that EPO 899 286 does not disclose a molecular structure in which “in the step of intra-molecule bonding by crosslinking the bonding residues, the bonding residues in the terminal portion of the molecular structure are crosslinked to form the molecular structure into a shell structure.”

EPO 899 286 does not disclose crosslinking to form the molecular structure into a shell structure. Thus, EPO 899 286 does not disclose the elements as recited in claim 2.

Regarding claim 3, Applicants respectfully submit that EPO 899 286 does not disclose that “the bonding residue is an optically bonding residue.” Thus, EPO 899 286 does not disclose the elements as recited in claim 3.

C. Jansen

Applicants respectfully submit that Jansen does not disclose “a step of intra-molecule bonding by crosslinking bonding residues in a molecular structure” as recited in amended claim 1.

Jansen discloses a structure having bonding residues, but does not disclose crosslinking. Thus, Jansen does not disclose the elements as recited in claim 1.

Regarding claim 3, Applicants respectfully submit that Jansen does not disclose that “the bonding residue is an optically bonding residue.” Regarding claim 5, Applicants respectfully submit that Jansen does not disclose that the bonding residue is “any one of a cinnamic acid group, an α -cyano cinnamic acid group, a coumalin group, a chalcone group, a cinnamylidene acetate group, a p-phenylene diacrylate group, an acetylene group, a diacetylene group, a

diphenyl acetylene group and an anthracene group.” Thus, Jansen does not disclose the elements as recited in claims 3 and 5.

D. Cooper

Applicants respectfully submit that Cooper does not disclose “a step of intra-molecule bonding by crosslinking bonding residues in a molecular structure” as recited in amended claim 1.

Cooper discloses a structure having bonding residues, but does not disclose crosslinking. Thus, Cooper does not disclose the elements as recited in claim 1.

Regarding claim 3, Applicants respectfully submit that Cooper does not disclose that “the bonding residue is an optically bonding residue.” Regarding claim 5, Applicants respectfully submit that Cooper does not disclose that the bonding residue is “any one of a cinnamic acid group, an α -cyano cinnamic acid group, a coumalin group, a chalcone group, a cinnamylidene acetate group, a p-phenylene diacrylate group, an acetylene group, a diacetylene group, a diphenyl acetylene group and an anthracene group.” Thus, Cooper does not disclose the elements as recited in claims 3 and 5.

Claim Rejections - 35 U.S.C. § 103

Claims 7-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2000-063513; EPO 899 286; Jansen; or Cooper. Favorable reconsideration is requested.

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The Office Action acknowledges that none of the references disclose formulas I or II as recited in claim 7. (Office Action, page 3.) However, the Office Action takes the position that the references disclose similar formulae and that the periphery of the claimed formulae does not affect the mechanism for forming the products.

Applicants respectfully submit that the claimed formulas having the bonding periphery does not have the same effect as the formulas disclosed in the prior art references.

The dendrimer of formulas I or II has bonding residues in the periphery that participate in a coupling reaction producing a nano-particle. (Specification, page 28.) Intramolecular coupling occurs with adjacent cinnamyl residues. (Specification, page 29.) Therefore, the periphery of the claimed formulas affects the mechanism for forming the products and produces a different effect from that produced from the formulas disclosed in the prior art references.

Therefore, claims 7-9 are non-obvious over the cited references.

Accordingly, withdrawal of the rejections of claims 1-9 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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